RANCHO SANTA ANA BOTANIC GARDEN
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GALVESIA SPECIOSA
ISLAND BUSH-SNAPDRAGON

1943

RANCHO SANTA ANA BOTANIC GARDEN
of the
NATIVE PLANTS OF CALIFORNIA
Santa Ana Cañon, Orange County, California
Established 1927 in Memory of
JOHN W. BIXBY

Number 60 April 30, 1943

GALVESIA SPECIOSA
ISLAND BUSH-SNAPDRAGON

Scrophulariaceae Figwort Family

An evergreen, soft-wooded, rather brittle-stemmed, spreading shrub 3-5 ft. across, usually less in height, sometimes growing through other bushes to 7 or 8 ft. high. Herbage bright green, glossy, nearly glabrous or more or less covered with soft, glandular pubescence, giving the plants a dull green appearance. Leaves mainly in whorls of 3, or opposite, especially on terminal shoots; stipules lacking; petioles $\frac{1}{4}$-$\frac{1}{2}$ in. long; blades 1-1$\frac{3}{4}$ in. long, ovate, entire, irregularly veined, usually with a conspicuous midrib and 2 lateral veins from base. Flowers solitary in axils of upper leaves, forming a leafy-bracted raceme 5-8 in. long, with 5-20 flowers; pedicels 1-1$\frac{1}{2}$ in. long, slightly curved; calyx of 5 triangular-ovate teeth, upper one $\frac{3}{8}$ in. long, others in 2 pairs, smaller, all persistent in fruit; corolla 1 in. long, brilliant light red, narrowly tubular, saccate at base, 2-lipped, upper lip with 2 oval lobes $\frac{3}{8}$ in. long, turned at right angles to tube, lower lip with 3 smaller lobes, central lobe often curved forward and smallest; palate of 2 ridges nearly closing corolla tube; stamens 5, the upper rudimentary and sterile, the other 4 in 2 pairs, attached at base of corolla, upper pair with filaments about as long as corolla tube, lower pair shorter, all dilated in upper portion and slightly hairy at base; anthers 2-celled. Ovary 2-celled, containing numerous ovules; style reddish, as long as stamens; capsule $\frac{3}{8}$ in. long, subglobose, tapering to summit, bearing 4 small protuberances around persistent style, opening by 2 or 3 pores to shed numerous, small seeds. Flowers mainly March to May; seeds in June and July.

The genus *Galvesia* (after D. Galvez, a Spanish administrator) was proposed in 1789 by Joseph Dombey, a French botanist, and consists of about 4 species of North and South America. It is closely related to *Antirrhinum* (true Snapdragon), the most obvious difference being the shrubby habit. Our *Galvesia* has snapdragon-like flowers, which, when gently pressed on the sides, open their lips in a truly animal-like fashion, and children who know them, call them "doggies". The mature capsule with its long style and pores is also like the head of some grotesque animal.

Galvesia speciosa (Latin for showy or handsome) was described in 1848 by Thos. Nuttall (English-American botanist, 1786-1858), who called it *Gambelia speciosa,* honoring Dr. Wm. Gambel who had found it on Santa Catalina Isl. in February, 1847. In 1868 Asa Gray decided that it was a species of *Antirrhinum,* but 1887 concluded that it belonged in *Galvesia,* along with the species of Mexico and South America. In 1926 Dr. P. A. Munz, in a monograph of *Antirrhinum* and related genera, placed our insular plant in *Galvesia,* a disposal which we believe will be generally accepted.

The Island Bush-Snapdragon, as *Galvesia speciosa* is known, is found in the wild only on Santa Catalina and San Clemente Isls. off

the coast of California, and on Guadalupe Isl. off the coast of Baja California. It is not abundant on any of these islands, and grows in protected ravines and canyons. There are two main wild forms—a rather glossy-leaved and nearly glabrous plant, and a dull-leaved rather hairy one. Dr. Ivan M. Johnston, of Harvard University, kindly examined one of the original Gambel specimens at Harvard in May, 1942 and wrote us that the leaves were essentially glabrous. Therefore, if it should ever be desirable to distinguish the glabrous and hairy forms by separate names, the latter would be the one to receive a new name.

We have grown *G. speciosa* at the Garden since 1927, for the glabrous form, and since 1931 for the hairy form, but in neither instance did we obtain our propagation materials direct from the wild plants on the islands. In October, 1927, Dr. L. R. Abrams, of Stanford University, sent us seeds of the glabrous form. These were taken from plants grown at Stanford University from seeds taken from a specimen collected on San Clemente Isl. by F. W. Peirson, of Pasadena. Our collection of the hairy form consisted of several plants presented to the Garden by Mr. Theo. Payne, of Los Angeles, who had grown them from seeds sent him by Miss Alice Eastwood, who had collected them originally on Santa Catalina Isl.

Propagation of *G. speciosa* is by seeds or cuttings, but except for the original lot of seedlings, which were easily grown, all of our later propagations have been by cuttings. Branches 4-6 in. long, with or without a heel, make excellent cuttings which root easily and quickly in sand at practically all seasons. Rooted cuttings should be transferred to containers using a loamy potting mixture, and held for several months before planting out, the best season for which is late fall to early spring. A partially shaded site is preferable, and a coarse, well-drained soil is desirable, but we have grown plants for nearly 10 years in heavy adobe. Plants in the shade have better foliage than those in the sun, but do not bloom so profusely. The main blooming period is in April and May, but a few flowers are produced throughout the year. Like many other soft-wooded shrubs, the Island Bush-Snapdragon needs periodic cutting back to encourage new growth, but the plants are ordinarily rather short lived and should be replaced after several years. The hairy form from Santa Catalina Isl. has been subject to a rust, whereas the glabrous form from San Clemente Isl. appears to be immune. The latter is also so much more attractive because of its glossy green foliage, that we suggest that it should be used exclusively. Some plants in private gardens have not done well, and, upon examination, have been found to be infested with nematodes, for which there appears to be no satisfactory treatment.

We heartily recommend *Galvesia speciosa* for most California gardens. It is almost certain to succeed in all of the coastal areas, either in full sun or in partial shade. If planted in the hot interior sections it should be given a more sheltered location, but requires a little direct sunshine to produce a profusion of flowers.

CARL B. WOLF

RANCHO SANTA ANA BOTANIC GARDEN

Dedication of Garden Foundation to the Board of Trustees for the Rancho Santa Ana Botanic Garden of the Native Plants of California:

"THE NATURE, OBJECT AND PURPOSE OF THE INSTITUTION HEREBY FOUNDED AND TO BE MAINTAINED HEREUNDER.

ITS NATURE: A botanic garden of the native plants of California, herbarium and botanical library, containing living and/or preserved specimens of trees, plants and flowers native to California, and literature relating thereto.

ITS OBJECT: The preservation and improvement of the property now transferred and such property as may hereafter be transferred to the Trustees for those who not only wish to enjoy, but to study, assembled in one accessible locality, native California plants; and for the advancement of science and education with reference to plant life indigenous to the State of California.

ITS PURPOSES: (a) An institution founded primarily for scientific research in the field of local botany.

(b) To preserve the native California flora, try to replenish the depleted supply of some of the rarest plants which are rapidly being exterminated, and bring together in a comparatively small area as complete a collection of the rich store of native California plants as can be grown in this southern section of the state, thereby promoting the general walfare of the people of the state by providing the means for encouraging and carrying on the above mentioned activities in said state and by doing such other things as may be necessary and desirable to carry out the objects hereof."

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